APPENDIX L NORTH BEND GRAVEL OPERATION TRANSPORTATION TECHNICAL REPORT

Comment 019-387

The FEIS should address the efficacy of the statement "It also addresses issues related to emergency vehicle response time, regional bus service, and pedestrian and bicycle traffic...and windshield damage in the project are..." [DEIS Vol II, Appendix L, page 1-3, section 1.3]. The FEIS needs to define when this was done, who did it, how it was measured, and where it is in this DEIS report.

Comment 020-510

The FEIS should address the efficacy of the statement "It also addresses issues related to emergency vehicle response time, regional bus service, and pedestrian and bicycle traffic ... and windshield damage in the project area..." [DEIS Vol. II, Appendix L, page 1-3, Section 1.3]. The FEIS needs to define when this was done, who did it, how it was measured, and where it is in this DEIS report.

Response

The transportation technical report has been revised to address specific transportation issues associated with the proposal including emergency vehicle response times, bus service and pedestrian and bicycle traffic.

Comment 019-396

The DEIS states, "Construction traffic impacts could be reduced and minimized by the following:

a. Regular sweeping and washing operations on highways and streets along truck haul routes." [DEIS Vol. II, Appendix L, page 3-26, Section 3.6.1]. The FEIS should address who will be in charge of scheduling and maintaining regular washing and sweeping operations. How often will it occur? How will it impact projected traffic volumes? How will surface water runoff from washing be addressed? Will it conform to NPDES? The FEIS should address what truck haul routes are involved since the DEIS indicates truck traffic will enter Interstate 90 at Exit 34 and not use local roadways.

Comment 020-518

The DEIS states, "" Construction traffic impacts could be reduced and minimized by the following: Regular sweeping and washing operations on highways and streets along truck haul routes." [DEIS Vol. II, Appendix L, page 3-26, section 3.6.1]. The FEIS should address who will be in charge of scheduling and maintaining regular washing and sweeping operations. How often will it occur? How will it impact projected traffic volumes? How will surface water runoff from washing be addressed? Will it conform to NPDES? The FEIS should address what truck haul routes are involved since the DEIS indicates truck traffic will enter Interstate 90 at Exit 34 and not use local roadways.

Response

Street cleaning and improvements will be in accordance with King County and WSDOT requirements and permits. Stipulations in permit applications will address other details. The trip pattern for haul trucks is clarified in the FEIS.

Comment 020-744

The DEIS cites (in vol. II app. L, sec. 2.6.2, subsec. 2.6.2.1 & 2.6.2.2, page 2-31) "600 middle school students, 35 times a day a school bus going to or from the school, 250 cars to or away from school and an additional 30 cars for evening events 2 x a week." and for "550 elementary school students, and 29 times a day a school bus going to or from, 200 cars to or away from school and an additional 30 cars for evening events 2 x a week". A conservative estimate, using this data, yields an additional 514 trips that was

not factored into the impacts analysis. This represents more than 50% of the proposed project's traffic estimate that were not included.

Response

Impacts related to additional auto, bicycle and pedestrian traffic in and around the project site are addressed in the Transportation chapter of the FEIS. School volumes have been added in the FEIS analysis.

Comment 019-430

The DEIS states, "...at its peak site expected to produce up to 2.1 million tons of gravel, 100K cu yards of concrete and 150K tons of asphalt each year." [DEIS Vol. II, Appendix L, page 3-2, section 3.2.2.1]. The FEIS should address which estimates of production are accurate and if the higher estimates were used to calculate traffic impacts.

Response

Comment acknowledged.

Comment 020-548

The DEIS states, "For gravel trucks, it is assumed that the average truckload is 25 tons." [DEIS Vol II, Appendix L, page 3-12, section 3.3.2.2]. The FEIS should know exactly what the weight should be, an "assumption" is a guess or conjecture and all data extrapolated from it may or may not be accurate.

Response

An average truckload is 25 tons.

Comment 020-746

The DEIS cites (in Vol. II App. L, Sec. 2.3.3 Congestion, pg. 2-28). "Congestion can also occur in the interchange when Snoqualmie Pass is closed by winter weather conditions". The DEIS does not address any baseline measurements or mitigations for these concerns in relation to pedestrian and/or bicycle traffic, vehicular traffic nor it's impact to police, fire or emergency medical services. (Refer to hardcopy for photograph, pg 123).

Interchange congestion during Pass closure.

Response

The project is not responsible for mitigating the baseline (no-action) alternative which includes Pass Closures. Impacts related to additional auto, bicycle, and pedestrian traffic in and around the project site are addressed in the Transportation chapter.

Comment 019-404

The DEIS states, "The counts performed at the Snohomish County site determined that 10.5% of the truck trips occur during the AM peak hour." [DEIS Vol. II, Appendix L, page 3-2, Section 3.2.2.2]. Therefore, during the AM peak 10.5% of 1152 truck trips or approximately 60 project trucks are loaded and exit the Lower Site. The FEIS should address what is the extent of the Lower Site staging area necessary to accommodate the queuing of that many (46-75) project trucks during the AM Peak hour? If the average is 65' x 60 trucks does that mean approximately a one-mile queue? What are the similarities and differences between the Snohomish County site and the North Bend site? Can these two sites at all comparable?

Response

The trucks would not arrive all at the same time. They would arrive throughout the hour and would not produce a queue offsite onto the public roadway system.

Comment 019-405

The DEIS states, "...a small percentage of the Gravel trucks would be stored on the site overnight." [DEIS Vol. II, Appendix L, page 3-2, Section 3.2.2.2]. If the majority

of the trucks will be kept offsite then where will the AM Peak queue develop for trucks entering the Lower Site? The DEIS states, "...two-way left-turn lane on both sides of this intersection would improve conditions by allowing through traffic to bypass vehicles turning in and out of the Lower Site..." [DEIS Vol. II, Appendix L, page 3-26, Section 3.6.2.2]. The FEIS should address how many trucks will be forced to queue on 146th and 468th Avenues just to gain entry to the Lower Site? How long will the queue be, how often will it form, and how long will it last during each day, especially Peak Months? How many gravel concrete, or asphalt trucks will be stored on site overnight and where will they be stored?

Response

Queuing should not occur on 468th Avenue SE or SE 146th Street. The two-way left-turn lane would allow traffic to bypass queued vehicles turning into Ken's Truck Town.

Comment 019-410

The DEIS states, "A special pressurized washing area should be constructed onsite to clean hauling trucks and wheels prior to leaving the project site to minimize air pollution and the spilling of rocks and dust particles on area roadways." [DEIS Vol. II, Appendix L, page 3-25, Section 3.5.1.2]. The FEIS should address how the Project will contain and treat by-product water from the washing facility. How and where will trucks queue to wait for pressurized washing?

Response

The trucks will queue onsite for washing. Wash water would be recycled.

Comment 019-411

The DEIS states, "When I-90 closes due to snowfall in Snoqualmie Pass or an accident...During these times, there is additional non-project heavy truck traffic in the project area that would conflict with the project traffic. This could include formal and informal truck parking, especially along SE 146th Street, possibly 468th Avenue, SE North Bend Way..." "[DEIS Vol. II, Appendix L, page 3-11, Section 3.2.8]. The FEIS should address what process will be implemented to prohibit "formal and informal truck parking" during I-90 road closure due to weather or accidents? The word "possibly" is misleading and untrue since the "informal" parking along 468th Avenue during pass closures becomes nearly impenetrable for through traffic.

Comment 019-413

The DEIS states, "When I-90 closes due to snowfall in Snoqualmie Pass or an accident...During these times, there is additional non-project heavy truck traffic in the project area that would conflict with the project traffic. This could include formal and informal truck parking,...SE Homestead Valley Way west of the Olallie State Park." "[DEIS Vol. II, Appendix L, page 3-11, Section 3.2.8]. The FEIS should address what process will be implemented to prohibit "formal and informal truck parking" during I-90 road closure due to weather or accidents? Exit 38 is often not accessible since the State Patrol closes I-90 at Exit 34 that further compounds problems under either Alternative 2 or 3.

Comment 020-536

The DEIS states, "When I-90 closes due to snowfall in Snoqualmie Pass or an accident... During these times, there is additional non-project heavy truck traffic in the project area that would conflict with the project traffic. This could include formal and informal truck parking, SE Homestead Valley Way west of the Olallie State Park." "[DEIS Vol. II, Appendix L, page 3-11, Section 3.2.8]. The FEIS should address what process will be implemented to prohibit "formal and informal truck parking" during I-90 road closure due to weather or accidents? Exit 38 is often not accessible since the State Patrol closes I-90 at Exit 34 that further compounds problems under either Alternative 2 or 3.

Response	Solving I-90 road closure problems is not part of the scope of this EIS.
Comment 019-412	The DEIS states, "the Pass was closed a total of 68 times during the previous three winters." "[DEIS Vol. II, Appendix L, page 2-28, Section 2.3.3]. It further states, "During these infrequent times, local citizens report that 468th Avenue SE becomes practically impassible." "[DEIS Vol. II, Appendix L, page 2-32, Section 2.8]. The FEIS should define the adjective "infrequent?" If there are 4 months in the winter months times 3 years equals approximately 360 days of winter. If there were 68 closures that means 19% of winter days account for a Pass closure. Is 19% only infrequent?
Comment 020-535	The DEIS states, " the Pass was closed a total of 68 times during the previous three winters." "[DEIS Vol. II, Appendix L, page 2-28, Section 2.3.3]. It further states, "During these infrequent times, local citizens report that 468th Avenue SE becomes practically impassible." "[DEIS Vol. II, Appendix L, page 2-32, Section 2.8]. The FEIS should define the adjective "infrequent?" If there are 4 months in the winter months times 3 years equals approximately 360 days of winter. If there were 68 closures that means 19% of winter days account for a Pass closure. Is 19% only infrequent?
Response	The word "infrequent" has been removed from the FEIS.
Comment 019-416	The FEIS should address the relevance of the statement "in the vicinity of the project are North Bend Boulevard (SR202)" "[DEIS Vol. II, Appendix L, page 2-5, Section 2.1.1]. How exactly is North Bend Boulevard in the vicinity of the project, unless trucks plan on transiting through the City of North Bend?
Comment 020-539	The FEIS should address the relevance of the statement " in the vicinity of the project are North Bend Boulevard (SR202)" "[DEIS Vol. [I, Appendix L, page 2-5, Section 2.1.1]. How exactly is North Bend Boulevard in the vicinity of the project, unless trucks plan on transiting through the City of North Bend?
Response	North Bend Boulevard has been removed from the list in the FEIS.
Comment 019-417	The DEIS states, "I-90 east of North Bend is a high-speed 70-mph facility going up hill to the summit at Snoqualmie PassIn 1998, approximately 26,000 vehicles per day (VPD) in 1998 used I-90 near Exit 32; 27,000 VPD used I-90 near Exit 34; and 26,000 VPD used I-90 near Exit 38; per WSDOT." "[DEIS Vol. II, Appendix L, page 2-9, Section 2.1.4]. How what this data derived and from what source within the WSDOT? What is the differentiation between automobiles and heavy truck traffic? What is the impact with varying posted speed limits between automobiles and trucks.
Comment 020-540	The DEIS states, I-90 east of North Bend is a high-speed 70-mph facility going up hill to the summit at Snoqualmie Pass. In 1998, approximately 26,000 vehicles per day (VPD) in 1998 used I-90 near Exit 32; 27,000 VPD used I-90 near Exit 34; and 26,000 VPD used I-90 near Exit 38; per WSDOT." "[DEIS Vol. II, Appendix L, page 2-9, Section 2.1.4]. How what this data derived and from what source within the WSDOT? What is the differentiation between automobiles and heavy truck traffic? What is the impact with varying posted speed limits between automobiles and trucks?
Response	This FEIS analyzes impacts of the proposal, not I-90 mainline traffic.

Comment 019-418	The FEIS should address if Table 16, Project Trip Generation, includes turnarounds.
Response	A trip is a trip, including turn around, when it crosses traffic counters.
Comment 019-422	The DEIS states, "This report provides a current traffic baseline for the transportation study area. In addition, it forecasts future traffic conditions in the study area under each of the project's four alternatives." [DEIS Vol. II, Appendix L, page 1.3, Section 1.2]. The FEIS should address the reliability of the method of analysis that was used?
Comment 020-543	The DEIS states, "This report provides a current traffic baseline for the transportation study area. In addition, it forecasts future traffic conditions in the study area under each of the project's four alternatives." [DEIS Vol 11, Appendix L, page 1.3, Section 1.2]. The FEIS should address the reliability of the method of analysis.
Response	Comments acknowledged. The analysis method is the current standard for traffic forecasting and LOS analysis.
Comment 019-424	The DEIS states that "Initially, the Lower Site would be used to supply direct sales of unprocessed materials to its customers and other Cadman, Inc. facilities." [DEIS Vol. II, Appendix L, page 2.5, Section 2.0]. The FEIS should address if this would generate additional trucks, to include customer trucks which are not counted in the total number of trucks accessing the facility.
Comment 020-545	The DEIS states that "Initially, the Lower Site would be used to supply direct sales of unprocessed materials to its customers and other Cadman, Inc. facilities." [DEIS Vol. II, Appendix L, page 2.5, Section 2.0]. The FEIS should address if this would generate additional trucks, to include customer trucks that are not counted in the total number of trucks accessing the facility.
Response	All known potential project operations are included in the EIS analysis.
Comment 019-431	The DEIS states, "For gravel trucks, it is assumed that the average truckload is 25 tons." [DEIS Vol. II, Appendix L, page 3-12, Section 3.3.2.2]. The FEIS should know exactly what the weight should be, an "assumption" is a guess or conjecture and all data extrapolated from it may or may not be accurate.
Response	This text describing the weight of material hauled by an average truck has been removed from the FEIS. Section 3.2.2.2 of the FEIS describes the bases for the daily truck trips.
Comment 019-432	The DEIS states, "All project-generated trips would arrive and leave project site via I-90 to Exit #34 (468th Ave SE) to SE 146 street. The trucks would not be allowed on North Bend Way" [DEIS Vol. II, Appendix L, page 3.5 Section 3.2.2.5]. The DEIS further states, "All truck drivers serving the project site would need to be aware of the potential hazards of driving through the school zone, along the major streets, in east North Bend" [DEIS Vol. II, Appendix L, page 3.25, Section 3.5.1.1]. The FEIS should address why drivers would need to be aware of potential hazards if they are only entering and exiting Interstate 90 at Exit 34. Are drivers going to in fact, utilize local roadways? If so, has the impact to the city of North Bend and surrounding communities been accurately evaluated?

Response

The DEIS states that the occasional local gravel/material delivery may occur in which drivers would be using these roads.

Comment 019-433

The DEIS states, "All project-generated trips would use this route with the exception of the occasional local project." [DEIS Vol. II, Appendix L, page 3.5, Section 3..2.2.5]. The FEIS should define "occasional." The DEIS should address if "exceptions" of project-generated trips include accessing North Bend Way and/or SE 140th Street to reach areas such as North Bend, Fall City to Redmond, or through Carnation and Duvall to Everett.

Comment 020-550

The DEIS states, "All project-generated trips would use this route with the exception of the occasional local project." [DEIS Vol. II, Appendix L, page 3.5, Section 3.2.2.5]. The FEIS should define "occasional." The DEIS should address if "exceptions" of project-generated trips include accessing North Bend Way and/or SE 140th Street to reach areas such as North Bend, Fall City to Redmond, or through Carnation and Duvall to Everett.

Response

A local project in east North Bend would occasionally require gravel from the proposed operation, and would depend on local construction activity.

Comment 019-434

The DEIS states, "Truck traffic from the Lower Site should be restricted to use only SE 146th St. and 468th Ave SE between SE 146th street and the I-90 Exit 34 ramps" [DEIS Vol. II, Appendix L, page 3.27 Section 3.6.2.2]. The FEIS should address who will assume the responsibility for the monitoring plan and implementation of mitigation measures? How will this plan be enforced with independent drivers who will compose 80% of the trucking fleet? What penalties will be used to enforce compliance?

Comment 020-551

The DEIS states, "Truck traffic from the Lower Site should be restricted to use only SE 146th St. and 468th Ave SE between SE 146th street and the I-90 Exit 34 ramps" [DEIS Vol. II, Appendix L, page 3.27 Section 3.6.2.2]. The FEIS should address who will assume the responsibility for the monitoring plan and implementation of mitigation measures? How will this plan be enforced with independent drivers who will compose 80% of the trucking fleet? What penalties will be used to enforce compliance?

Response

Restriction details will have to be stated in a site grading or building permit. King County would enforce permit conditions.

Comment 019-441

The DEIS indicates, "King (County) has listed seven potential transportation improvement projects in the study area. ... listed ... as low priority" [DEIS Vol. II, Appendix L, page 2-10, Section 2. 1.5]. The FEIS should address whether it will be necessary to upgrade priority status because of the increased traffic from other projects such as 2 schools, and 137 residences. Why were these projects not factored into traffic projections? The FEIS should address why all known future growths are not included in traffic estimates.

Response

Traffic growth is accounted for in the growth rate factors. Additional school volumes have been added in the FEIS.

Comment 019-442

The DEIS states, "With night time site operation and road way being widened to three lanes, a continuous street light system should be installed from I-90 though the required channelization improvements along 468 Avenue SE." [DEIS Vol. II, Appendix L, page 3.27, Section 3.6.2.2]. The FEIS should define the actual street light areas. Will this street light system increase reflected glare to surrounding neighborhoods and business areas, especially the Edgewick Inn?

Response

King County standards call for lighting multi-lane (more than two lane) roadways. Lighting is discussed in the Aesthetics, Light, and Glare chapter of the FEIS.

Comment 019-443

The DEIS states, "Sidewalks in the study area are only found along SE 146th Street and part of the east-side of 468th Avenue SE between SE 144th Street and SE 146th Street. In some locations the shoulder width is adequate, but in other locations the shoulder width is inadequate." [DEIS Vol. II, Appendix L, page 2.30 -31, Section 2.5. 1]. The FEIS should address why actual measurements of shoulders were not provided to allow an appropriate safety evaluation for school children and other pedestrians?

Comment 020-561

The DEIS states, "Sidewalks in the study area are only found along SE 146th Street and part of the east-side of 468th Avenue SE between SE 144th Street and SE 146th Street. In some locations the should width is adequate, but in other locations the shoulder width is inadequate." [DEIS Vol. II, Appendix L, page 2.30 -31, Section 2.5.1]. The FEIS should address why actual measurements of shoulders were not provided to allow an appropriate safety evaluation for school children and other pedestrians?

Response

See Table 1 in the FEIS Transportation Technical Report for shoulder widths.

Comment 019-444a

The DEIS states, "... a school bus would either be going to or away from the middle school site 35 times a day" and that "a school bus would either be going to or away from the proposed elementary school site 29 times a day." [DEIS Vol. II, Appendix L, page 2-31, Section 2.6.2.1 and 2.6.2.2]. The FEIS should address why school buses, which are not equal to automobiles are not properly reflected in the traffic study. The automobile trips to and from school are not factored into the Peak times. It appears that estimates for bus and automobile traffic are conservatively estimated and do not reflect realistic numbers.

Comment 020-564

The DEIS states, "... a school bus would either be going to or away from the middle school site 35 times a day" and that "a school bus would either be going to or away from the proposed elementary school site 29 times a day." [DEIS Vol. II, Appendix L, page 2-31, Section 2.6.2.1 and 2.6.2.2]. The FEIS should address why school buses, which are not equal to automobiles are not properly reflected in the traffic study. The automobile trips to and from school are not factored into the Peak times. It appears that estimates for bus and automobile traffic are conservatively estimated and do not reflect realistic numbers.

Response

School volumes have been added in the FEIS analysis. Remove word "minimal" from EIS. See LOS Analysis for Alternative Impacts to all traffic in the FEIS.

Comment 019-445

The DEIS states, "Though Alternative 3 is not projected to increase pedestrian and bicycle traffic use, the truck traffic in and out of the lower site the first 5 years would conflict with informal pedestrian and bicycle travel along SE 146th and 468th Avenue SE." [DEIS Vol. II, Appendix L, page 2.30 -31, Section 2.5.1]. The FEIS should

address what exactly is "informal" pedestrian and bicycle travel? Do children walking and riding their bicycles to and from school amount to only "informal?"

Response

The word "informal" in the FEIS has been removed.

Comment 019-446

The DEIS states, "There would likely be additional pedestrian and bicycle travel along 468th Avenue SE during the first 5 years as the proposed middle school opens ..."

[DEIS Vol. II, Appendix L, page 3-20, Section 3.3.5]. In addition the DEIS states, "Completion of the proposed middle school during the planned 5-year mining period of the Lower Site would increase school-related bus, car, pedestrian and bicycle traffic in project area. Additional traffic from the gravel mining, concrete and asphalt batch plants, would conflict with school traffic traveling on 468th Avenue SE, turning at SE North Bend Way and using the I-90 Exit 34 on/off ramps." [DEIS Vol. II, Appendix L, page 3-20, Section 3.3.6]. The FEIS should address why there is no measurement for the significant bike or pedestrian traffic to and from the middle and elementary schools. Why does the DEIS refer to these schools as "proposed" rather than "planned"? The FEIS should include mitigation measures to lessen "conflicts" between gravel trucks and school traffic whether automobile, bicycle, or pedestrian? What infra-structure improvements are required by developers for the safety of pedestrian and bicycle traffic?

Response

The route of the proposed traffic is along 468th Avenue SE from SE 146th Street to I-90. Therefore the DEIS looks at the traffic impact and mitigation for that stretch of 468th Avenue SE that would result from the proposal. Mitigation measures in the FEIS include a paved shoulder or sidewalk, lowered speed limit, and other measures..

Comment 019-447

The DEIS states, "The police, fire and emergency services under Alternative 2 or 3 would experience more conflicting traffic on 468th Avenue SE and at Exit 34." [DEIS Vol. II, Appendix L, page 3-11, Section 3.2.9, and page 3-21, Section 3.3.9]. The FEIS should define "more conflicting" and describe exactly what the impact will be on emergency vehicles.

Response

Any proposal that increases overall traffic volumes, increases the number of potential conflicts, therefore the words "more conflicting" were used. However, mitigation measures to provide a third lane on 468th Avenue and 8-foot shoulders will provide alternative access to emergency vehicles.

Comment 020-745

The DEIS cites (in Vol. II App. L, Sec. 2.3.3 Congestion, pg. 2-28) "However, vehicles do pass on the shoulder which raises safety concerns". The DEIS does not address any baseline measurements or mitigations for these concerns in relation to pedestrian and/or bicycle traffic.

Response

Impacts and mitigation measures related to additional auto, bicycle and pedestrian traffic in and around the Project site are addressed in the Transportation chapter of the FEIS.

Comment 019-357

The DEIS did not and the FEIS should provide data, potential impacts and mitigations for residences, businesses, schools and pedestrian and/or bicycle traffic in relation to the following DEIS items:

a. Vol. II App. L, Sec. 2.3.3 Congestion, pg. 2-28 "However, vehicles do pass on the shoulder which raises safety concerns".

b. Vol. II, App. K., pg. 3-2 Fire and Emergency Services "Increased truck activity may create increased traffic congestion, vehicle accidents and slower emergency response times".

c. Vol. II App. L, Sec 2.6.2, subsec. 2.6.2.1 & 2.6.2.2, page 2-31 "600 middle school students, 35 times a day a school bus going to or from the school, 250 cars to or away from school and an additional 30 cars for evening events 2 x a week" and "550 elementary school students, and 29 times a day a school bus going to or from, 200 cars to or away from school and an additional 30 cars for evening events 2 x a week".

Response

Impacts to emergency response are discussed in the Transportation chapter. Impacts to pedestrian and bicycle traffic are discussed in the Transportation chapter.

Comment 019-579

The FEIS should address whether the baseline data used to calculate traffic accidents is accurate since "According to WSDOT as of December 1999 they had complete accident data through the year 1996 for review. They estimated approximately 72% of 1997's accident records, 65% of 1998's and 30% of 1999's records have been processed." [DEIS Vol. II. Appendix L, page 2-30, Section 2.4.2].

Response

The accident data given is an accurate report from WSDOT.

Comment 020-500

The DEIS states, "The traffic and transportation impacts within this technical report are limited to that study area." That study area includes Exits 32 through Exit 38, and the local roads connecting the mining sites. [DEIS Vol. II, Appendix L, page 1.3, Section 1.2]. The FEIS needs to include in its study area Exit 25, Exit 28, Exit 31, and downtown North Bend. The DEIS offers no assurances nor mitigation on assuring that trucks only use the Exit 34 corridor. If Exit 34 is not routinely used for entry and exiting of Interstate 90 these additional areas will be significantly impacted.

Response

The concentration of truck traffic would be within the study area. Once the trucks are on I-90 they would use various routes to deliver the loads depending on the market demand.

Comment 020-505

The FEIS should address whether the baseline data used to calculate traffic accidents is accurate since "According to WSDOT as of December 1999 they had complete accident data through the year 1996 for review. They estimated approximately 72% of 1997"s accident records, 65% of 1998's and 30% of 1999's records have been processed." [DEIS Vol. II. Appendix L, page, 2-30, Section 2.4.21.

Response

Accident data in the FEIS has been updated.

Comment 019-384

The FEIS should address "With the additional truck traffic from this project, especially during the first 5 years of operation on the Lower Site, the potential exists for more conflicts and accidents with other vehicles." [DEIS Vol. II. Appendix L, page 3-19, Section 3.3.4]. The FEIS needs to measure this identified risk and describe the projects plan for mitigation.

Comment 020-506

The FEIS should address "With the additional truck traffic from this project, especially during the first 5 years of operation on the Lower Site, the potential exists for more conflicts and accidents with other vehicles." [DEIS Vol. II. Appendix L, page 3-19, Section 3.3.4]. The FEIS needs to measure this identified risk and describe the projects plan for mitigation.

Response

Increases in accidents generally follow increases in traffic volumes. Recommended mitigation prior to project startup would reduce these impacts.

Comment 019-399

The FEIS should address the efficacy of the statement "In addition, it forecast future traffic conditions in the study area under each of the project's four alternatives. [DEIS Vol. II, Appendix L, page 1-3, Section 1.3]. The FEIS needs to define when this was done, who did it, how it was measured, and where it was in this DEIS report?

Comment 020-508

The FEIS should address the efficacy of the statement "In addition, it forecast future traffic conditions in the study area under each of the project's four alternatives. [DEIS Vol. II, Appendix L, page 1-3, Section 1.3]. The FEIS needs to define when this was done, who did it, how it was measured, and where it was in this DEIS report?

Response

The Transportation section of the DEIS and the Transportation chapter of the FEIS discuss project trip generation, peak hour LOS and other impacts.

Comment 019-388

The DEIS states, "The Washington State Patrol Fire Training Academy, according to Tracy Caldwell, has 14 full-time employees and many part-time employees and students.' [DEIS Vol. II, Appendix L, page 2-8, Section 2.1..3]. The FEIS should address what is the actually number of individuals who access the Fire Training Academy on a daily basis, to include different months of the year? How will these individuals be affected under Alternative 4 compared to the number of individuals impacted at Exit 34 under Alternative 2 or 3?

Comment 020-511

The DEIS states, "The Washington State Patrol Fire Training Academy, according to Tracy Caldwell, has 14 full-time employees and many part-time employees and students." [DEIS Vol I1, Appendix L, page 2-8, section 2.1.3]. The FEIS should address what is the actually number of individuals who access the Fire Training Academy on a daily basis, to include different months of the year? How will these individuals be affected under Alternative 4 compared to the number of individuals impacted at Exit 34 under Alternative 2 or 3?

Response

The Academy is open 7 days per week. There are 10 staff members. About 50 instructors, who have other jobs, teach at the Academy part-time. The number of students attending training varies, but generally ranges from 40 to 80 students per day. The least busy months are July and August. These individuals would be affected in proportion to the number of trucks using SE Grouse Ridge Road, SE Homestead Valley Road and Exit 38 for each alternative.

Comment 019-390

The DEIS states, "Heavy trucks have a significant impact on the design and maintenance of road surface and subsurface structures... These streets are "believed" to have a road structure that would support heavy vehicles..." [DEIS Vol. II, Appendix L, page 2-35, Section 2.9.2]. The FEIS should address whether these streets actually have the subsurface to support heavy gravel trucks and not base its conclusion on "believe." This fact needs to be substantiated.

Comment 020-512

The DEIS states, "Heavy trucks have a significant impact on the design and maintenance of road surface and subsurface structures. These streets are "believed" to have a road structure that would support heavy vehicles..." [DEIS Vol. II, Appendix L, page 2-35, Section 2.9.2]. The FEIS should address whether these streets actually have the subsurface to support heavy gravel trucks and not base its conclusion on "believe." This fact needs to be substantiated.

Response

Heavy trucks are currently using 468th Avenue SE. By classification, the roads are designed for heavy traffic.

Comment 020-521

The DEIS states, "...volumes collected in September were increased by 17% ... traffic volumes collected in March and April were increased by 45%." [DEIS Vol. 11, Appendix L, page 2-12, Section 2.2.1]. The FEIS should address how the 17% and 45% respectively were determined and why a conservative approach was utilized. For example, were truck numbers measured individually or according to the number of axles?

Response

The 17% and 45% were based on WSDOT I-90 traffic projections.

Comment 019-403

The DEIS states, the AM peak hour is from 7 a.m. - 8 a.m. and the PM Peak hour is from 4:30PM to 5:30PM." [DEIS Vol. II, Appendix L, page 2-21, Section 2.3.2]. The DEIS also states, "...Vehicle turn movements were observed during morning and evening peak periods (7AM to 9AM and 4 to 6PM)." [DEIS Vol. II, Appendix L, page 2-11, Section 2.2.1]. The FEIS needs to adjust all measurements to reflect consistent peak times. The FEIS should address the discrepancy between these statements. What is the actual peak time of operation?

Comment 020-524

The DEIS states, the AM peak hour is from 7AM - 8AM and the PM Peak hour is from 4:30PM to 5:30PM." [DEIS Vol. 1I, Appendix L, page 2-21, Section 2.3.2]. The DEIS also states, "... Vehicle turn movements were observed during morning and evening peak periods (7AM to 9AM and 4 to 6PM)." [DEIS Vol. 11, Appendix L, page 2-11, Section 2.2.1]. The FEIS needs to adjust all measurements to reflect consistent peak times. The FEIS should address the discrepancy between these statements. What is the actual peak time of operation?

Response

This is consistent and there is no discrepancy here. The peak "hour" lies within the peak "period", which is also the field observation period for traffic.

Comment 020-525

The DEIS states, "The counts performed at the Snohomish County site determined that 10.5% of the truck trips occur during the AM peak hour." [DEIS Vol. II, Appendix L, page 3-2, Section 3.2.2.2]. Therefore, during the AM peak 10.5% of 1152 truck trips or approximately 60 project trucks are loaded and exit the Lower Site. The FEIS should address what is the extent of the Lower Site staging area necessary to accommodate the queuing of that many (46-75') project trucks during the AM Peak hour? If the average is 65' x 60 trucks does that mean approximately a one-mile queue? What are the similarities and differences between the Snohomish County site and the North Bend site? Are these two sites at all comparable?

Response

The trucks would not arrive all at the same time. They would arrive throughout the hour and would not produce a queue offsite onto the public roadway system.

Comment 020-526

The DEIS states, "... a small percentage of the Gravel trucks would be stored on the site overnight." [DEIS Vol. II, Appendix L, page 3-2, Section 3. 2. 2. 2.]. If the majority of the trucks will be kept offsite then where will the AM Peak queue develop for trucks entering the Lower Site? The DEIS states, "... two-way left-turn lane on both sides of this intersection would improve conditions by allowing through traffic to bypass queued vehicles turning in and out of the Lower Site ..." [DEIS Vol. 11, Appendix L, page 3-26, Section 3.6.2.2]. The FEIS should address how many trucks will be forced to queue on 146th and 468th Avenues just to gain entry to the Lower Site? How long will the queue be, how often will it form, and how long will it last during each day, especially Peak Months? How many gravel, concrete, or asphalt trucks will be stored on site overnight and where will they be stored?

Response

Queuing should not occur on 468th Avenue SE or SE 146th Street. The text should read, "bypassing queued vehicles turning left into Ken's Truck Town." Trucks would not queue offsite onto the public road system.

Comment 020-532

The DEIS states, "When I-90 closes due to snowfall in Snoqualmie Pass or an accident... During these times, there is additional non-project heavy truck traffic in the project area that would conflict with the project traffic. This could include formal and informal truck parking, especially along SE 146th Street, possibly 468th Avenue, SE North Bend Way ..." "[DEIS Vol. II, Appendix L, page 3-11, Section 3.2.8]. The FEIS should address what process will be implemented to prohibit "formal and informal truck parking" during I-90 road closure due to weather or accidents? The word "possibly" is misleading and untrue since the "informal" parking along 468th Avenue during pass closures becomes nearly impenetrable for through traffic.

Response

Solving I-90 road closure projects is not within the scope of this EIS.

Comment 020-547

The DEIS states, "... at its peak site expected to produce up to 2.1 million tons of gravel, 100K cubic yards of concrete and 150K tons of asphalt each year." [DEIS Vol. II, Appendix L, page 3-2, Section 3.2.2.1]. The FEIS should address which estimates of production are accurate and if the higher estimates were used to calculate traffic impacts.

Response

The production estimates shown above were used to estimate trip generation.

Comment 020-549

The DEIS states, "All project-generated trips would arrive and leave project site via I-90 to Exit #34 (468th Ave SE) to SE 146 street. The trucks would not be allowed on North Bend Way ..." [DEIS Vol. II, Appendix L, page 3.5 Section 3.2.2.5]. The DEIS further states, "All truck drivers serving the project site would need to be aware of the potential hazards of driving through the school zone, along the major streets, in east North Bend" [DEIS Vol. II, Appendix L, page 3.25, Section 3.5.1.1]. The FEIS should address why drivers would need to be aware of potential hazards if they are only entering and exiting Interstate 90 at Exit 34. Are drivers going to in fact, utilize local roadways? If so, has the impact to the city of North Bend and surrounding communities been accurately evaluated?

Response

The occasional local delivery may occur in which drivers would be using these local roads.

Comment 020-554

The DEIS states, "Congestion occasionally occurs along 468th' Avenue SE between I-90 and SE 144th Street." [DEIS Vol. L page 3.12-16, Section 3.12.4.3]. The FEIS

should define "occasionally" and provide supporting data on how often this corridor is congested. If this corridor is under capacity and congestion is occurring then is this not a unique traffic area?

Response

Congestion referred to in the EIS is based on the peak hour volumes or the worst-case traffic volume scenario. Capacity is proposed to be increased through mitigation measures to minimize congestion impacts.

Comment 020-559

The DEIS indicates, "King (County) has listed seven potential transportation improvement projects in the study area listed ... as low priority" [DEIS Vol. II, Appendix L, page 2-10, Section 2.1.5]. The FEIS should address whether it will be necessary to upgrade priority status because of the increased traffic from other projects such as 2 schools, and 137 residences. Why were these projects not factored into traffic projections? The FEIS should address why all known future growths are not included in traffic estimates.

Response

Traffic growth is accounted for in the growth rate factors. Additional school volumes have been added in the FEIS.

Comment 020-565

The DEIS states, "Additional truck traffic from the gravel mining, concrete and asphalt batch plants would conflict with minimal school traffic generated from the future schools ..." [DEIS Vol. [I, Appendix L, page 3-24, Section 3.4.6]. The FEIS should exclude the word "minimal" since these schools will have a significant impact on the Exit 34 corridor. The FEIS should describe the percentage differences each Alternative will have on impacting future school traffic.

Response

See the LOS analysis for alternative impact to all traffic. Future school traffic volumes have been added to the analysis in the FEIS.

Comment 020-567

The DEIS states, "Though Alternative 3 is not projected to increase pedestrian and bicycle traffic use, the truck traffic in and out of the lower site the first 5 years would conflict with informal pedestrian and bicycle travel along SE 146th and 468th Avenue SE." [DEIS Vol. II, Appendix L, page 2.30 -31, Section 2.5.1]. The FEIS should address what exactly is "informal" pedestrian and bicycle travel? Do children walking and riding their bicycles to and from school amount to only "informal?"

Response

The word "informal" has been changed in the FEIS.

Comment 020-568

The DEIS states, "There would likely be additional pedestrian and bicycle travel along 468th Avenue SE during the first 5 years as the proposed middle school opens ..." [DEIS Vol. II, Appendix L, page 3-20, Section 3.3.5]. In addition the DEIS states, "Completion of the proposed middle school during the planned 5-year mining period of the Lower Site would increase school-related bus, car, pedestrian and bicycle traffic in project area.

Additional traffic from the gravel mining, concrete and asphalt batch plants, would conflict with school traffic traveling on 468 Avenue SE, turning at SE North Bend Way and using the I-90 Exit 34 on/off ramps." [DEIS Vol. II, Appendix L, page 3-20, Section 3.3.6]. The FEIS should address why there is no measurement for the significant bike or pedestrian traffic to and from the middle and elementary schools. Why does the DEIS refer to these schools as "proposed" rather than "planned"? The

FEIS should include mitigation measures to lessen "conflicts" between gravel trucks and school traffic whether automobile, bus, bicycle, or pedestrian? What infrastructure improvements do developers for the safety of pedestrian and bicycle traffic require?

Response

The route of the proposed traffic is along 468th Avenue SE from SE 146th Street to I-90, so the EIS looks at traffic impact and mitigation for that area.

Comment 020-570

The DEIS states, "The police, fire and emergency services under Alternative 2 or 3 would experience more conflicting traffic on 468 Avenue SE and at Exit 34." [DEIS Vol. II, Appendix L, page 3-11, Section 3.2.9, and page 3-21, Section 3.3.9]. The FEIS should define "more conflicting" and describe exactly what the impact will be on emergency vehicles.

Response

Any proposal that increases overall traffic volumes, increases the number of potential conflicts, therefore the words "more conflicting" were used. However, mitigation measures to provide a third lane on 468th Avenue and 8-foot shoulders will provide alternative access to emergency vehicles.

Comment 024A-108

Improvements The necessity for major roadway improvements is seriously minimized in the discussion in section 3.6.2.2 of Appendix L. An existing condition of significant traffic congestion already exists at Ken's Truck Town and the project will add truck traffic that enter directly across from the driveway access point. Under the proposed mitigation measures on page 3-27 Appendix L the improvement of an extra-wide southbound lane is recommended. The discussion goes on to state that "A lane width of 16 feet may be sufficient, but should be validated with truck turning templates." This modeling should have been done for the EIS and the mitigation confirmed. The assumption that "Implementation of the improvements as discussed above, including the left-turn channelization would eliminate blockage caused by trucks waiting to turn into Seattle East Auto Plaza." (page 3-27 Appendix L) is a conclusion that we would like to see confirmed by additional analysis.

Response

Additional analysis including truck queuing has been performed for the FEIS. A truck-turning analysis would be required during permitting.

Comment 019-414

The DEIS states, "Construction impacts in the area of the Upper Site...under Alternative 4 would be similar to those listed under Alternative 3 for the site and road." [DEIS Vol. II, Appendix L, page 3-21, Section 3.4.1]. The FEIS should define how less construction due to the lack of Lower Site processing facilities would result in similar traffic impacts at the Upper Site.

Comment 019-415

The DEIS analyzes on page 3-21, section 3.4.2.2 the Trip Rates for asphalt and concrete trucks under Alternative 4. The FEIS should address exactly how there are concrete and asphalt trips if Alternative 4 is implemented?

Comment 020-537

The DEIS states, "Construction impacts in the area of the Upper Site ... under Alternative 4 would be similar to those listed under Alternative 3 for the site and road. "[DEIS Vol. II, Appendix L, page 3-21, Section 3.4.1]. The FEIS should define how less construction due to the lack of Lower Site processing facilities would result in similar traffic impacts at the Upper Site.

Comment 020-538 The DEIS analyzes on page 3-21, Section 3.4.2.2 the Trip Rates for asphalt and

concrete trucks under Alternative 4. The FEIS should address exactly how there are

concrete and asphalt trips if Alternative 4 is implemented?

Response The traffic impact summaries have been adjusted for Alternative 4 to note that there is

no asphalt or concrete truck travel.

Comment 019-448 The DEIS states, "Local truck traffic and passenger car traffic was noticeable at

(monitored) Site 2 (Wood River subdivision) and Site 4 (future middle school site)." [DEIS Vol. II, Appendix L, page 3-25, Section 3.5.2]. The FEIS should define what "noticeable" means and how this "noticeable" noise currently impacts the Wood River subdivision. What will the cumulative effects be with the addition of the mining

facility and truck traffic?

Comment 020-571 The DEIS states, "Local truck traffic and passenger car traffic was noticeable at

(monitored) Site 2 (Wood River subdivision) and Site 4 (future middle school site)." [DEIS Vol. II, Appendix L, page 3-25, Section 3.5.2]. The FEIS should define what "noticeable" means and how this "noticeable" noise currently impacts the Wood River subdivision. What will the cumulative effects be with the addition of the mining

facility and truck traffic?

Response Comments acknowledged. The DEIS Noise Technical Report lists existing noise

levels at these sites, defines noise, and discusses cumulative impacts. The mining

facility traffic would not be going past Sites 2 and 4.

Comment 019-401 The DEIS states, "The current average heavy truck using these routes is considered

roughly equivalent to the HCS "default" heavy truck. [DEIS Vol. II, Appendix L,

page 2-20, Section 2.3.1].

Comment 020-523 The DEIS states, "The current average heavy truck using these routes is considered

roughly equivalent to the HCS "default" heavy truck." [DEIS Vol. II, Appendix L, page 2-20, Section 2. 3.1]. The FEIS should address the need to provide more thorough measurements than "roughly." The FEIS should address the fact that trucks

much larger than the conventional average would service the project site.

ResponseThe use of the word "roughly" in this context is to portray the fact that the vehicles

being analyzed are approximately equivalent to the assumptions in the HCS software

and are sufficient for this analysis.